



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,840	03/17/2004	Atsushi Fujita	04329.3270	3094

22852 7590 04/19/2006

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

FAULK, DEVONA E

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/801,840	FUJITA, ATSUSHI	
	Examiner	Art Unit	
	Devona E. Faulk	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1-4, 6-8.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed 2/3/2006, with respect to the 112 rejections of claims 6 and 8 have been fully considered and are persuasive. The 112 rejections of claims 6 and 8 have been withdrawn.
2. Applicant's arguments filed 2/3/06, regarding the 103 rejection of claim 6, have been fully considered but they are persuasive, only with regards to the A/D converter language.

Regarding the 103 rejection of claim 6, the applicant asserts that claim 6 recites an A/D converter that both "converts analog signals into digital signals" and is used by a detection section to "detect whether or not the voltage of one of the terminals is substantially equal to a ground voltage" and that Matsumoto as modified by Yang is deficient because there is no teaching of this feature.

Matsumoto discloses a detection section which detects whether or not a voltage of one of the right and left signal channel terminals is less than or greater than a ground voltage, and provides a detection result (control means 18, See Constitution on abstract page ; paragraphs 0029, 0030 under Detailed Description). The output from A/D converters (18a and 18b) are used by the control means (18) to determine if a voltage of one of the terminals is substantially equal to a ground voltage (paragraphs 0028-0030).

The examiner mistakenly listed 6L and 6R when it 18a and 18b should have been the converters identified. The examiner has corrected this oversight.

The examiner did not explicitly recite that Matsumoto discloses that the output from A/D converters (18a and 18b) are used by the control means (18) to determine a voltage level.

3. Applicant's arguments filed 2/3/06, regarding the 103 rejections, have been fully considered but they are not persuasive.

Regarding the 103 rejections of claims 1-4,6 and 7, the applicant asserts that the examiner has not established a prima facie case of obviousness because there is no motivation to combine Yang with Matsumoto.

In response to applicant's argument that that Matsumoto's detection circuit includes voltage divider circuits to support a dynamic microphone and that in order to modify Matsumoto with Yang as proposed by the examiner, the voltage divider circuits of Matsumoto would necessarily be excluded, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Matsumoto discloses a detection section which detects whether or not a voltage of one of the right and left signal channel terminals is less than or greater than a ground voltage, and provides a detection result (control means 18, See Constitution on abstract page ; paragraphs 0029, 0030 under Detailed

Description) . Matsumoto discloses detecting a voltage level (paragraph 0028-0030). Yang teaches of detecting whether a mono device or stereo device by detecting whether or not a voltage is equal to a reference voltage (column 4, lines 47-48, and 65-lines 67). It is clear that the prior art used are analogous and Yang supplies motivation as to why one of ordinary skill in the art would want to detects whether or not a voltage is equal to a ground voltage, which is to identify whether a stereo or mono device is connected (column 4, lines 65-67).

4. The applicant amended the specification to by changing the number identifying the microphone power supply from 12 to 19. The Figures still identify the microphone power supply as 12. The Figures need to be changed accordingly.

Drawings

5. The drawings are objected to because the number identifying the microphone power supply was changed in the current amendment from 12 to 19. The Figures still identify the microphone power supply as 12. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be

necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 1-4,6-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (JP 08-293159) in view of Yang (U.S. 6,748,085).

Claims 1 and 6 share common features.

Regarding **claims 1 and 6**, Matsumoto discloses a sound recording apparatus (Figure 1) comprising:

A microphone input terminal having right and left signal channel terminals and a ground terminal right and left audio signals input from the microphone input terminal (a microphone input terminal having right and left signal channel terminals and a ground terminal, Figure 1, page 2 of Figures; Figure 4a);

A recording section which records, in a recording medium, right and left audio signals input from the microphone input terminal (sound recording section 14, paragraph 0033 under Detailed Description);

a microphone power supply section which supplies power to a microphone connected to the microphone input terminal via the right and left signal channel terminals and the ground terminal (paragraph 0014 under Detailed Description);

a detection section which detects whether or not a voltage of one of the right and left signal channel terminals is less than or greater than a ground voltage, and provides a detection result (control means 18, See Constitution on abstract page ; paragraphs 0028,0029,0030 under Detailed Description) ;

and a control section which control a recording operation of the recording section in accordance with the detection result (See Constitution on abstract page, control means 18, Figure 1, page 2 of figures; paragraph 0026 under Detailed Description).

Additionally, regarding **claim 6**, Matsumoto further discloses microphone amplifiers, which amplify right and left audio signals input from the microphone terminal (Figure 3, 4L and 4R) and A/D converters which convert analog signal into digital signals and whose outputs are used to detect a voltage level (18a,18b, Figure 1, page 2 of Figures; paragraphs 0028-0030).

Matsumoto fails to disclose of detecting whether or not a voltage is equal to a ground voltage. Yang teaches of detecting whether a mono device or stereo device by detecting whether or not a voltage is equal to a reference voltage

(column 4, lines 47-48, and 65-lines 67). It would have been obvious to modify Matsumoto so that the detection sections detects whether or not a voltage is equal to a reference voltage as taught by Yang in order to identify whether a stereo or mono device is connected (column 4, lines 65-67). It would have been obvious that the reference voltage could be a ground voltage.

Regarding **claim 2**, Matsumoto as modified by Yang discloses wherein the detection section comprises a comparator which compares the voltage of the right signal channel terminal with a predetermined threshold value, and an output voltage of the comparator is provided as the detection result (See above apropos rejection of claim 1; Matsumoto, Constitution on abstracts page; paragraphs 0029,0030 under Detailed Description).

Regarding **claim 3**, Matsumoto as modified by Yang discloses wherein when the detection result indicates that the voltage of the right signal channel terminal is substantially equal to that of the ground terminal, the control section controls the recording section so that only the left audio signal input from the left signal channel terminal is recorded (sound recording section 14, paragraph 0029-0030 under Detailed Description).

Regarding **claim 4**, Matsumoto as modified by Yang discloses wherein the recording section has right and left sound recording channels, and when the detection result indicates that the voltage of the right signal channel terminal is substantially equal to that of the ground terminal, the control section controls the recording section so that the left audio signal input form the left signal channel terminal is recorded into the left

sound recording channel and into the right sound recording channel. are comprehended by claim 1 (See Abstract and Constitution; paragraphs 0028-0034 under Detailed Description).

Regarding **claim 7**, Matsumoto as modified by Yang discloses wherein the detection section detects whether or not the voltage of one of the terminals is equal to the ground voltage every time a microphone plug is plugged into the microphone input terminal (See above apropos rejection of claim 7)

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848.

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2615. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DEF



VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600